

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. A method for manipulating at least one packet header compression parameter
5 included in a negotiation packet, said method including the steps of:

substituting at least one instruction set associated with said at least one parameter
at a layer of a protocol stack, said at least one instruction set for use in establishing a
communication channel between a pair of correspondents,

10 said method of substituting said at least one instruction set further
including the steps of:

a software module at said layer of a responding correspondent
intercepting and examining at least one negotiation packet from an
initiating correspondent;

15 said software module determining whether a first instruction set is
present in the negotiation packet;

said software module substituting said first instruction set with a
second instruction set; and

20 at said initiating correspondent receiving said second instruction
set and transmitting subsequent packets to said responding correspondent
in accordance with said second instruction set.

2. The method of claim 1, wherein said at least one instruction set for use in
establishing a communication channel between said correspondents includes a
compression request for header compression.

25 3. The method of claim 1, wherein said at least one instruction set is used for
establishing a communication channel between said correspondents includes a
compression reject for header compression.

4. The method of claim 1, wherein said least one packet header compression parameter is associated with at least one compression type option for header compression.

5. The method of claim 1, wherein said header compression is implemented by a Van Jacobson compression algorithm.

6. The method of claim 1, wherein said negotiation packets are intercepted before reaching said layer.

7. The method of claim 1, wherein said layer of said protocol stack is a point-to-point protocol (PPP) layer.

8. The method of claim 1, wherein said at least one negotiation packet is a point-to-point protocol (PPP) negotiation packet.

9. A method for disabling header compression of TCP/IP headers during an establishment and configuration of a communication protocol and communication channel between a pair of correspondents, said method including the steps of:

an initiating correspondent transmitting PPP negotiation packets including at least one PPP compression request packet having at least one TCP/IP header compression option type, said option type associated with a first instruction set for said establishment and configuration of said communication protocol and channel;

a software module coupled to a responding correspondent intercepting and examining said at least one PPP compression request packet before said at least one PPP compression request packet reaches said responding correspondent's PPP layer;

said software module determining said option type included in said at least one PPP compression request packet;

said software module substituting said first instruction set with a second instruction set to said at initiating correspondent, said second instruction set having an option type rejecting said compression request

transmitting subsequent data packets in accordance with said second instruction set.

10. A method for disabling header compression of TCP/IP headers during an establishment and configuration of a communication protocol and communication channel between an initiating correspondent and a responding correspondent, said method including the steps of:

an initiating correspondent transmitting at least one PPP negotiation packet having at least one acceptable TCP/IP header compression option type, said option type being associated with a first instruction set for said establishment and configuration of said communication protocol and channel;

a software module coupled to said responding correspondent intercepting and examining said at least one PPP compression request packet before said at least one PPP compression request packet reaches said responding correspondent's PPP layer;

said software module modifying said acceptable option type to an unacceptable option type and transmitting said modified PPP negotiation packet to said responding correspondent's PPP layer;

said responding correspondent's PPP layer receiving said modified PPP negotiation packet and rejecting said unacceptable option type;

said software module receiving said PPP negotiation packet having said unacceptable option type;

said software module modifying said unacceptable option type to said acceptable type and transmitting said PPP negotiation packet to said initiating correspondent.

11. A method for disabling header compression of TCP/IP headers during an establishment and configuration of a communication protocol and communication channel between an initiating correspondent and a responding correspondent, said method including the steps of:

an initiating correspondent transmitting at least one PPP negotiation packet having at least one acceptable TCP/IP header compression option type, said option type

being associated with a first instruction set for said establishment and configuration of said communication protocol and channel;

a software module coupled to said initiating correspondent's PPP layer for intercepting and examining said at least one PPP compression request packet before said at least one PPP compression request packet is transmitted to said responding correspondent,

said software module modifying said acceptable option type to an unacceptable option type and transmitting said modified PPP negotiation packet to said responding correspondent's PPP layer;

said responding correspondent's PPP layer receiving said modified PPP negotiation packet and rejecting said unacceptable option type;

said software module receiving said PPP negotiation packet having said unacceptable option type;

said software module modifying said unacceptable option type to said acceptable type and transmitting said PPP negotiation packet to said initiating correspondent's PPP layer.

12. A system for manipulating at least one packet header compression parameter included in a negotiation packet, said at least parameter associated with at least one instruction set for establishing a communication channel between a pair of correspondents, the system having:

a software module at a layer of a protocol stack included in a computer readable medium a responding correspondent, said software module configured to intercept and examine at least one negotiation packet from said initiating correspondent and configured to substitute at least one instruction set associated with said at least one parameter with a second instruction set;

wherein subsequent packets to said responding correspondent in accordance with said second instruction set.

13. The system of claim 12, wherein said software module is located at a point-to-point protocol (PPP) layer of said protocol stack.

14. The system of claim 12, wherein said negotiation packets are point-to-point protocol (PPP) negotiation packets.

5 15. The system of claim 13 and 14, wherein said PPP negotiation packets are intercepted by said software module located at said PPP layer before reaching said PPP layer.

10

15
20
25
30